

Claims

1. An image decoding apparatus for performing a decoding process with a prescribed coding method, comprising:

decoding means for performing the decoding process on picture data encoded with the coding method; and

control means for controlling said decoding means, wherein, in a fast playback mode, said control means controls said decoding means so as to extract simple playback frames comprising an I-picture and following prescribed pieces of P-pictures on a basis of the I-picture existing at a desired position in the picture data.

2. The image decoding apparatus according to claim 1, wherein

said control unit controls said decoding means so as to decode the I-picture and each of the P-pictures composing the simple playback frames in order, without decoding a part after the simple playback frames, in a case where the fast playback mode is fast forward playback, and controls said decoding means so as to find a part before the simple playback frames, sequentially decode the I-picture and each of the P-pictures composing the simple playback frames, and output the simple playback frames in a reverse order of a decoding order, in a case where the fast playback mode is fast backward playback.

3. The image decoding apparatus according to claim 1, wherein said control means controls said decoding means so as to decode part or all of information on a prescribed information basis, for the I-picture and each of the P-pictures in the simple playback frames in the picture data subjected to intra-frame coding of the coding method, and controls said decoding means so as to selectively perform a first process to perform no process, a second process to decode only spatial prediction based on a prediction method signal obtained through reversible encoding, a third process to decode only direct current components of transformation coefficients with transformation coding, or a fourth process that is a combination of the second and third processes, for parts which are not decoded.

4. A picture decoding method for performing a decoding process under a prescribed coding method, comprising
extracting simple playback frames comprising an I-picture and following prescribed pieces of P-pictures on a basis of the I-picture locating at a desired position of picture data encoded with the coding method in a fast playback mode.

5. The image decoding method according to claim 4, wherein:
in a case where the fast playback mode is fast forward playback, the I-picture and each of the P-pictures composing the simple playback frames are decoded in order, without decoding a

part after the simple playback frames; and

in a case where the fast playback mode is fast backward playback, a part before the simple playback frames is found, the I-picture and each of the P-pictures composing the simple playback frames are decoded in order, and the simple playback frames are decoded in a reverse order of a decoding order.

6. The image decoding method according to claim 4, wherein:

part or all of information is decoded on a prescribed information unit for the I-picture and each of the P-pictures in the simple playback frames in the picture data subjected to intra-frame coding of the coding method; and

for parts that are not decoded, a first process to perform no process, a second process to decode only spatial prediction based on a prediction method signal obtained through reversible encoding, a third process to decode only direct current components of transformation coefficients with transformation coding, or a fourth process which is a combination of the second and third processes is selectively performed.